

### **T-37-1 – “Status Re-Survey of the Alligator Snapping Turtle in Southeastern Louisiana”**

*Abstract:* Between 1997 and 2007, Alligator Snapping Turtle population demographics were unchanged (percentage of juveniles, weight-length relationships) except that the ratio of adult males to adult females went from 1:1 to 3:1, and the trap rate decreased by 37%. Trap rates for seven other turtle species were unchanged, or increased, regardless of harvest pressure. A missing size class of juvenile ASTs was detected in the 1960s and 2007, but not in 1997. The missing size class indicates that reproductive success, and thus, populations of ASTs fluctuate. For this reason, it remains to be determined whether the decrease in trap rate is a result of timing of surveys within cyclic population fluctuations, or whether it is indicative of a broad decline in AST populations.

The 1997 surveys were intended to establish baseline data on Alligator Snapping Turtle populations in southeastern Louisiana. The 2007 surveys were intended to determine growth and movement data for turtles marked in 1997, as well as determine changes or similarities in demographic structure. Due to a lack of recaptures, the first objective was not met. Another objective of the 2007 surveys was to add a dataset for population trend analysis. We recommend that the sites be resurveyed in the near future (within three years) to help determine whether trends detected in the 2007 surveys are real or a result of natural fluctuations, and to re-trap turtles before tags are lost.

**(Abstract completed by Jeff Boundy, due date: 27 May 2008)**

This grant was closed 31 December 2007. **For more information** about State Wildlife Grant T-37, or to obtain copies of interim or final reports, please contact the State Wildlife Grant Coordinator, LDWF Fur & Refuge Division.